

**What is claimed is:**

1. A service effect improving system having an object network as a language processing function and a common platform as an interface function with a client for offering a service depending on an intention of a client, comprising: an object forming the system having a hierarchical structure comprising:
  - a data model whose attribute structure is determined as a template;
  - an object model arranged in a higher order than the data model;
  - a role model which is arranged in a higher order than the object model, and represents contents of a process to be performed in an environment as a set of a plurality of object models; and
  - a process model which is arranged at a highest order and defines a dynamic process cooperatively performed by a plurality of role models as one process; and
  - a model adaptation unit performing adaptation for improvement of a service effect independently for each model of an object in the hierarchical

structure.

2. The system according to claim 1, wherein:

5 said service system uses a network formed by a plurality of clients and a plurality of servers for offering a service; and

said model adaptation unit performs adaptation for attaining an intention of each client.

10 3. The system according to claim 2, further comprising

an external environment data management unit centrally managing cooperative data for the service executing process which can be referred to in parallel when each party of a plurality of clients and servers requires it, wherein

when intentions of a plurality of clients are cooperative intentions of cooperatively realizing mutual requests or conflicting intentions of mutually preventing realization of intentions of opposite parties, said model adaptation unit dynamically performs adaptation for cooperative intentions or conflicting intentions of a group of clients using contents of management of said external environment data management unit.

4. The system according to claim 1, further comprising

5 a modification unit performing generic determiner modification at a specification level on each model of the object, wherein

said model adaptation unit adapts a parameter for embodiment of the determiner modification.

10 5. The system according to claim 1, wherein:

a consistent restriction item is set as an attribute of an object for an object of each model; and

15 said model adaptation unit performs adaptation such that the consistent restriction can be satisfied.

6. The system according to claim 5, further comprising

20 a validity check unit carrying out a validity check on a process performed by a model of an object of the hierarchical level corresponding to the consistent restriction item by dividing the check corresponding to each hierarchical level.

7. The system according to claim 5, wherein  
a process situation of a system is divided  
corresponding to the consistent restriction item,  
and represented as modules corresponding to a  
5 syntax structure of an object.
8. The system according to claim 5, wherein  
in the syntax structure of the object, a  
priority is assigned to data of a consistent  
10 restriction item as an attribute of the object.
9. The system according to claim 1, further  
comprising  
a support role unit supporting adaptation by  
15 said model adaptation unit for improvement of a  
service effect corresponding to a feature of an  
object model at each hierarchical level.
10. The system according to claim 1, further  
20 comprising  
a reference model which is normal to a  
hierarchical structure of the data model, object  
model, role model, and process model, and is used  
in realizing a basic service to be performed in a  
25 process of the object network.

11. A service effect improving system having an object network as a language processing function and a common platform as an interface function with  
5 a client for offering a service depending on an intention of a client, comprising: an object forming the system having a hierarchical structure comprising:

- 10 a data model whose attribute structure is determined as a template;
- an object model arranged in a higher order than the data model;
- 15 a role model which is arranged in a higher order than the object model, and represents contents of a process to be performed in an environment as a set of a plurality of object models; and
- 20 a process model which is arranged at a highest order and defines a dynamic process cooperatively performed by a plurality of role models as one process; and
- 25 model adaptation means for performing adaptation for improvement of a service effect independently for each model of an object in the hierarchical structure.